AMENDMENTS TO THE CLAIMS

Please amend the claims as shown, without prejudice or disclaimer.

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-23. (Canceled)

24. (Previously presented) A method of reducing or moderating a postprandial rise in plasma glucose in a mammal comprising administering to said mammal an amylin or an amylin agonist analogue in an amount effective to reduce or moderate a postprandial rise in plasma glucose, wherein the amylin agonist analogue is a peptide.

25. (Currently amended) The method of claim 24 wherein the amylin agonist is an amylin agonist analogue having the following amino acid sequence: [SEQ ID NO:40]
$^{1}A_1$-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_1-Asn-^{15}Phe-Leu-C_1-D_1-E_1-$^{20}F_1$-G_1-Asn-H_1-Gly-^{25}Pro-I_1-Leu-Pro-J_1-^{30}Thr-K_1-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z
wherein

A_1 is Lys, Ala, Ser or Hydrogen;

B_1 is Ala, [[Set]] Ser or Thr;

C_1 is Val, Leu or Ile;

D_1 is His or Arg;

E_1 is Ser or Thr;

F_1 is Ser, Thr, Gln or Asn;

G_1 is Asn, Gln or His;

H_1 is Phe, Leu or Tyr;

I_1 is Ile, Val, Ala or Leu;

J_1 is Ser, Pro or Thr;

K_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is an amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Pro, and K_1 is Asn [SEQ ID NO:41]; then one or more A_1 to K_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

26. (Currently amended) The method of claim 24 wherein the amylin agonist is an amylin agonist analogue having the following amino acid sequence: [SEQ ID NO:42]

$^{1}A_1$-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_1-Asn-^{15}Phe-Leu-C_1-D_1-E_1-$^{20}F_1$-G_1-Asn-H_1-Gly-^{25}Pro-I_1-Leu-J_1-Pro-^{30}Thr-K_1-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z

wherein

A_1 is Lys, Ala, Ser or hydrogen;

B_1 is Ala, Ser or Thr;

C_1 is Val, Leu or Ile;

D_1 is His or Arg;

E_1 is Ser or Thr;

F_1 is Ser, Thr, Gln or Asn;

G_1 is Asn, Gln or His;

H_1 is Phe, Leu or Tyr;

I_1 is Ile, Val, Ala or Leu;

J_1 is Ser, Pro, Leu, Ile or Thr;

K_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy, and provided that when

(a) A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Pro and K_1 is Asn [SEQ ID NO:41]; or

(b) A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is His, E_1 is Ser, F_1 is Asn, G_1 is Asn, H_1 is Leu, I_1 is Val, J_1 is Ser and K_1 is Asn [SEQ ID NO:43];

then one or more of A_1 to K_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

27. (Currently amended) The method of claim 24 wherein the amylin agonist is an amylin agonist analogue having the following amino acid sequence: [SEQ ID NO:44]

$^{1}A_1$-X-Asn-Thr-^{5}Ala-Thr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_1-Asn-^{15}Phe-Leu-C_1-D_1-E_1-$^{20}F_1$-G_1-Asn-H_1-Gly-$^{25}I_1$-J_1-Leu-Pro-Pro-^{30}Thr-K_1-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z

wherein

A_1 is Lys, Ala, Ser or hydrogen;

B_1 is Ala, Ser or Thr;

C_1 is Val, Leu or Ile;

D_1 is His or Arg;

E_1 is Ser or Thr;

F_1 is Ser, Thr, Gln or Asn;

G_1 is Asn, Gln or His;

H_1 is Phe, Leu or Tyr;

I_1 is Ala or Pro;

J_1 is Ile, Val, Ala or Leu;

K_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Pro, J_1 is Val and K_1 is Asn [SEQ ID NO:41]; then one or more of A_1 to K_1 is a D-

amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

28. (Currently amended) The method of claim 24 wherein the amylin agonist is an amylin agonist analogue having the following amino acid sequence: [SEQ ID NO:45]

$^{1}A_1$-X-Asn-Thr-^{5}Ala-'Ihr-Y-Ala-Thr-^{10}Gln-Arg-Leu-B_1-Asn-^{15}Phe-Leu-C_1-D_1-E_1-$^{20}F_1$-G_1-Asn-H_1-Gly-^{25}Pro-I_1-Leu-Pro-Pro-^{30}Thr-J_1-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z

wherein

A_1 is Lys, Ala, Ser or hydrogen;

B_1 is Ala, Ser or Thr;

C_1 is Val, Leu or Ile;

D_1 is His or Arg;

E_1 is Ser or Thr;

F_1 is Ser, Thr, Gln or Asn;

G_1 is Asn, Gln or His;

H_1 is Phe, Leu or Tyr;

I_1 is Ile, Val, Ala or Leu

J_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and

provided that when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Val and J_1 is Asn [SEQ ID NO:41]; then one or more of A_1 to J_1 is a D-amino acid and Z is selected from the group consisting of alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy.

29. (Currently amended) The method of claim 24 wherein said amylin agonist is any one of $^{18}Arg^{25,28}$Pro-h-amylin [SEQ ID NO:3], des-^{1}Lys$^{18}Arg^{25,28}$Pro-h-amylin [SEQ ID NO:6], ^{25,28,29}Pro-h-amylin [SEQ ID NO:1], des-^{1}Lys^{25,28,29}Pro-h-amylin [SEQ ID NO:10], $^{18}Arg^{25,28,29}$Pro-h-amylin [SEQ ID NO:8], des-^{1}Lys$^{18}Arg^{25,28,29}$Pro-h-amylin [SEQ ID NO:9],

$^{25}Pro^{26}Val^{28,29}$Pro-h-amylin [SEQ ID NO:7], or des-$^{1}Lys^{25}Pro^{26}Val^{28,29}$Pro-h-amylin [SEQ ID NO:38].

30. (Currently amended) The method of claim 24 wherein the amylin agonist is ^{25,28,29}Pro-h-amylin [SEQ ID NO:1].

31-37. (Canceled)

38. (Previously presented) The method of claim 24 wherein the mammal has diabetes.

39. (Previously presented) The method of claim 38 wherein the diabetes is type 1.

40. (Previously presented) The method of claim 38 wherein the diabetes is type 2.

41. (Previously presented) The method of claim 25 wherein the mammal has diabetes.

42. (Previously presented) The method of claim 41 wherein the diabetes is type 1.

43. (Previously presented) The method of claim 41 wherein the diabetes is type 2.

44. (Previously presented) The method of claim 26 wherein the mammal has diabetes.

45. (Previously presented) The method of claim 44 wherein the diabetes is type 1.

46. (Previously presented) The method of claim 44 wherein the diabetes is type 2.

47. (Previously presented) The method of claim 27 wherein the mammal has diabetes.

48. (Previously presented) The method of claim 47 wherein the diabetes is type 1.

49. (Previously presented) The method of claim 47 wherein the diabetes is type 2.

50. (Previously presented) The method of claim 28 wherein the mammal has diabetes.

51. (Previously presented) The method of claim 50 wherein the diabetes is type 1.

52. (Previously presented) The method of claim 50 wherein the diabetes is type 2.

53. (Previously presented) The method of claim 30 wherein the mammal has diabetes.

54. (Previously presented) The method of claim 53 wherein the diabetes is type 1.

55. (Previously presented) The method of claim 53 wherein the diabetes is type 2.

56. (Currently amended) The method of claim 24 wherein the amylin agonist is an amylin agonist analogue having the following amino acid sequence: [SEQ ID NO:31]

$^{1}A_1$-X-Asn-Thr-^{5}Ala-Thr-[[X]] Y-Ala-Thr-^{10}Gln-Arg-Leu-B_1-Asn-^{15}Phe-Leu-C_1-D_1-E_1-$^{20}F_1$-G_1-Asn-H_1-Gly-$^{25}I_1$-J_1-Leu-K_1-L_1-^{30}Thr-M_1-Val-Gly-Ser-^{35}Asn-Thr-Tyr-Z

wherein

A_1 is Lys, Ala, Ser, Hydrogen or acetylated Lys;

B_1 is Ala, Ser or Thr;

C_1 is Val, Leu or Ile;

D_1 is His or Arg;

E_1 is Ser or Thr;

F_1 is Ser, Thr, Gln or Asn;

G_1 is Asn, Gln or His;

H_1 is Phe, Leu or Tyr,

I_1 is Ala or Pro;

J_1 is Ile, Val, Ala or Leu;

K_1 is Ser, Pro, Leu, Ile or Thr;

L_1 is Ser, Pro or Thr;

M_1 is Asn, Asp or Gln;

X and Y are independently selected residues having side chains which are chemically bonded to each other to form an intramolecular linkage, wherein said intramolecular linkage comprises a disulfide bond, a lactam or a thioether linkage; and Z is [[an]] a hydroxy, amino, alkylamino, dialkylamino, cycloalkylamino, arylamino, aralkylamino, alkyloxy, aryloxy or aralkyloxy; and provided that

(a) when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is His, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Phe, I_1 is Ala, J_1 is Ile, K_1 is Ser, L_1 is Ser, and M_1 is Asn [SEQ ID NO:46];

(b) when A_1 is Lys, B_1 is Ala, C_1 is Ile, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Ala, J_1 is Ile, K_1 is Ser, L_1 is Pro, and M_1 is Asn [SEQ ID NO:47];

(c) when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Thr, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Ala, J_1 is Ile, K_1 is Ser, L_1 is Pro, and M_1 is Asn [SEQ ID NO:48];

(d) when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is Asn, H_1 is Leu, I_1 is Pro, J_1 is Val, K_1 is Pro, L_1 is Pro, and M_1 is Asn [SEQ ID NO:41];

(e) when A_1 is Lys, B_1 is Ala, C_1 is Val, D_1 is His, E_1 is Ser, F_1 is Asn, G_1 is Asn, H_1 is Leu, I_1 is Pro, J_1 is Val, K_1 is Ser, L_1 is Pro and M_1 is Asn [SEQ ID NO:43]; or

(f) when A_1 is Lys, B_1 is Thr, C_1 is Val, D_1 is Arg, E_1 is Ser, F_1 is Ser, G_1 is His, H_1 is Leu, I_1 is Ala, J_1 is Ala, K_1 is Leu, L_1 is Pro and M_1 is Asp [SEQ ID NO:49];

then one or more of any of A_1 to M_1 is not an L-amino acid and Z is not amino.

57. (Previously presented) The method of claim 56 wherein the mammal has diabetes.

58. (Previously presented) The method of claim 57 wherein the diabetes is type 1.

59. (Previously presented) The method of claim 57 wherein the diabetes is type 2.

60-69. (Canceled)